# STATE OF MISSOURI

# DEPARTMENT OF NATURAL RESOURCES

#### MISSOURI CLEAN WATER COMMISSION



# MISSOURI STATE OPERATING PERMIT

In compliance with the Missouri Clean Water Law, (Chapter 644 R.S. Mo. as amended, hereinafter, the Law), and the Federal Water Pollution Control Act (Public Law 92-500, 92<sup>nd</sup> Congress) as amended,

Permit No. MO-0117471

Owner: Superior Services, Inc.

Address: 10150 West National Avenue, West Allis, WI 53227

Continuing Authority: Superior Maple Hill Landfill, Inc. Address: P.O. Box 389, Macon, MO 63552

Facility Name: Superior Maple Hill Landfill

Facility Address: 31226 Intrepiod Road, Macon, MO 63552

Legal Description: See page 2 Latitude/Longitude: See page 2

Receiving Stream: #001-Unnamed Tributary to East Fork Chariton River (U)

#003-Unnamed Tributary to Middle Fork Chariton River (U) #004-Unnamed Tributary to East Fork Chariton River (U)

First Classified Stream and ID: #001-East Fork Chariton River (P) (00682)

#003-Middle Fork Chariton River (C) (00698)
#004-East Fork Chariton River (P) (00682)

USGS Basin & Sub-watershed No.: #001-(10280203-040001); #003-(10280203-010001)

#004-(10280203-040001)

is authorized to discharge from the facility described herein, in accordance with the effluent limitations and monitoring requirements as set forth herein:

#### **FACILITY DESCRIPTION**

See page 2

This permit authorizes only wastewater discharges under the Missouri Clean Water Law and the National Pollutant Discharge Elimination System; it does not apply to other regulated areas. This permit pray be appealed in accordance with Section 644.051.6 of

the Law.

December 1, 2000 January 11, 2002

Effective Date Revised

Stephen M.Mahfood, Director Department of Natural Resources Executive Secretary, Clean Water Commission

November 30, 2005

Expiration Date MO 780-0041 (10-93) Interim Director of Staff, Clean Water Commission

#### FACILITY DESCRIPTION (continued)

Outfall #001 - Active open landfill/Stormwater runoff - SIC #4953
Settling basin/stormwater runoff.

Design flow is 2.4 MGD.

Actual flow is dependent upon precipitation.

Legal Description: SE  $\frac{1}{4}$ , NW  $\frac{1}{4}$ , Sec. 24, T57N, R15W, Macon County

Latitude/Longitude: +3944074/-09231499

Outfall #002 - Eliminated, goes to Outfall #001.

Outfall #003 - Capped landfill - SIC #4953

Stormwater runoff from closed phase I & phase II.

Design flow is 2.54 MGD.

Legal Description: NW ¼, NW ¼, Sec. 24, T57N, R15W, Macon County

Latitude/Longitude: +3944153/-09232180

 $\underline{\text{Outfall } \#004}$  - Proposed Phase IV landfill cell/stormwater runoff - SIC#4952

Settling basin/stormwater runoff

Design flow is 4.0 MGD.

Actual flow is dependent upon precipitation.

Legal Description: NE ¼, SW ¼, Sec. 13, T57N, R15W, Macon County

Latitude/Longitude: +3944372/-09231567

#### A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

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PERMIT NUMBER MO-0117471

The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective upon issuance and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:

		FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS				
OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE			
Outfalls #001, #003 & #004									
Flow	MGD	*		*	inst once/quarter**	tantaneous estimate			
Rainfall	inches	*		*	daily measuremer	nt ***			
BETX	mg/L	0.75		0.75	once/quarter**	grab			
Biochemical Oxygen Demand <sub>5</sub>	mg/L	60		45	once/quarter**	grab			
Chemical Oxygen Demand	mg/L	120		90	once/quarter**	grab			
Total Suspended Solids	mg/L	80		60	once/quarter**	grab			
Settleable Solids	mL/L/hr	1.5		1.0	once/quarter**	grab			
Total Dissolved Solids	mg/L	*		*	once/quarter**	grab			
Conductivity (Specific Conductance)	micromhos /com 25°C	*		*	once/quarter**	grab			
Chloride Plus Sulfates	mg/L	1000		*	once/quarter**	grab			
Iron, Total Recoverable	mg/L	*		*	once/quarter**	grab			
PH - Units	SU	****		****	once/quarter**	grab			
MONITORING REPORTS SHALL BE SUBMITTED QUARTERLY; THE FIRST IS DUE April 28, 2002.									
Calcium	mg/L	*		*	once/year****	grab			
Fluoride	mg/L	*		*	once/year*****	grab			
Total Hardness	mg/L	*		*	once/year****	grab			
Barium, Total Recoverable	mg/L	*		*	once/year****	grab			
Boron, Total Recoverable	μg/L	*		*	once/year*****	grab			
Cadmium, Total Recoverable	mg/L	*		*	once/year*****	grab			
Chromium, Total Recoverable	mg/L	*		*	once/year*****	grab			
Cobalt, Total Recoverable	mg/L	*		*	once/year*****	grab			
Copper, Total Recoverable	mg/L	*		*	once/year*****	grab			
Sodium, Total Recoverable	mg/L	*		*	once/year*****	grab			

MONITORING REPORTS SHALL BE SUBMITTED ANNUALLY; THE FIRST REPORT IS DUE October 28, 2002. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.

# **B. STANDARD CONDITIONS**

IN ADDITION TO SPECIFIED CONDITIONS STATED HEREIN, THIS PERMIT IS SUBJECT TO THE ATTACHED  $\underline{\texttt{Part}}$  I STANDARD CONDITIONS DATED  $\underline{\texttt{October}}$  1, 1980, AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.

#### PAGE NUMBER 4 of 6

#### A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

PERMIT NUMBER MO-0117471

The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective upon issuance and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:

		FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
Outfalls #001, #003 & #004						
Ammonia as N	mg/L	****		****	once/year*****	grab
Nitrate and Nitrite as N	mg/L	*		*	once/year*****	grab
Phosphorous, Total Recoverable	mg/L	*		*	once/year*****	grab
Mercury, Total Recoverable	mg/L	*		*	once/year****	grab
Arsenic, Total Recoverable	mg/L	*		*	once/year****	grab
Lead, Total Recoverable	μg/L	*		*	once/year****	grab
Selenium, Total Recoverable	mg/L	*		*	once/year****	grab
Silver, Total Recoverable	mg/L	*		*	once/year****	grab
Manganese, Total Recoverable	mg/L	*		*	once/year****	grab
Magnesium, Total Recoverable	mg/L	*		*	once/year****	grab
Zinc, Total Recoverable	μg/L	*		*	once/year****	grab
Antimony, Total Recoverable	mg/L	*		*	once/year****	grab
Beryllium, Total Recoverable	mg/L	*		*	once/year****	grab
Nickel, Total Recoverable	mg/L	*		*	once/year****	grab
Sulfate	mg/L	*		*	once/year****	grab
Thallium, Total Recoverable	mg/L	*		*	once/year****	grab
Total Organic Carbon	mg/L	*		*	once/year****	grab
Vanadium, Total Recoverable	mg/L	*		*	once/year****	grab
Oil and Grease	mg/L	15		10	once/year*****	grab

MONITORING REPORTS SHALL BE SUBMITTED  $\underline{\text{ANNUALLY}}$ ; THE FIRST REPORT IS DUE  $\underline{\text{October } 28, 2002}$ . THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.

# **B. STANDARD CONDITIONS**

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MO 780-0010 (8/91)

## A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

- \* Monitoring requirement only.
- \*\* Once per quarter in the months of March, June, September and December.
- \*\*\* Grab samples shall be collected during a rainfall event, when there is runoff from the landfill site. The sample shall be collected no later than one hour after runoff begins.
- \*\*\*\* pH is measured in pH units and is not to be averaged. The pH is limited to the range of 6.0-9.0 pH units.
- \*\*\*\*\* The discharge shall not exceed the appropriate values in Table B 10 CSR 20 7.031.
- \*\*\*\*\* Samples to be taken in September.

## C. SPECIAL CONDITIONS

- 1. This permit may be reopened and modified, or alternatively revoked and reissued, to:
  - (a) Comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a) (2) of the Clean Water Act, if the effluent standard or limitation so issued or approved:
    - (1) contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
    - (2) controls any pollutant not limited in the permit.
  - (b) Incorporate new or modified effluent limitations or other conditions, if the result of a waste load allocation study, toxicity test or other information indicates changes are necessary to assure compliance with Missouri's Water Quality Standards.
  - (c) Incorporate new or modified effluent limitations or other conditions if, as the result of a watershed analysis, a Total Maximum Daily Load (TMDL) limitation is developed for the receiving waters which are currently included in Missouri's list of waters of the state not fully achieving the state's water quality standards, also called the 303(d) list.

The permit as modified or reissued under this paragraph shall also contain any other requirements of the Clean Water Act then applicable.

- 2. All outfalls must be clearly marked in the field.
- 3. Changes in Discharges of Toxic Substances

The permittee shall notify the Director as soon as it knows or has reason to believe:

- (a) That any activity has occurred or will occur which would result in the discharge of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels:"
  - (1) One hundred micrograms per liter (100 ug/L);
  - (2) Two hundred micrograms per liter (200 ug/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 ug/L) for 2,5 dinitrophenol and for 2methyl-4, 6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
  - (3) Five (5) times the maximum concentration value reported for the pollutant in the permit application;
  - (4) The level established in Part A of the permit by the Director.
- (b) That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant, which was not reported in the permit application.

#### C. SPECIAL CONDITIONS (continued)

- 4. Report as no-discharge when a discharge does not occur during the report period.
- 5. General Criteria. The following water quality criteria shall be applicable to all waters of the state at all times including mixing zones. No water contaminant, by itself or in combination with other substances, shall prevent the waters of the state from meeting the following conditions:
  - (a) Waters shall be free from substances in sufficient amounts to cause the formation of putrescent, unsightly or harmful bottom deposits or prevent full maintenance of beneficial uses;
  - (b) Waters shall be free from oil, scum and floating debris in sufficient amounts to be unsightly or prevent full maintenance of beneficial uses;
  - (c) Waters shall be free from substances in sufficient amounts to cause unsightly color or turbidity, offensive odor or prevent full maintenance of beneficial uses;
  - (d) Waters shall be free from substances or conditions in sufficient amounts to result in toxicity to human, animal or aquatic life;
  - (e) There shall be no significant human health hazard from incidental contact with the water;
  - (f) There shall be no acute toxicity to livestock or wildlife watering;
  - (g) Waters shall be free from physical, chemical or hydrologic changes that would impair the natural biological community;
  - (h) Waters shall be free from used tires, car bodies, appliances, demolition debris, used vehicles or equipment and solid waste as defined in Missouri's Solid Waste Law, section 260.200, RSMo, except as the use of such materials is specifically permitted pursuant to section 260.200-260.247.

#### 6. Sanitary & Demolition Landfill

- (a) All design and operating specifications and all Solid Waste Management Program approval conditions pertaining to water quality are hereby made a part of this permit and shall apply throughout the life of this permit without regard to other conditions, permits, occurrences, etc.
- (b) This permit does not allow the discharge of storm water that has contacted the open face of the landfill. This permit does not allow the discharge of untreated leachate. All leachate shall be handled in accordance with the <a href="Solid Waste">Solid Waste</a> <a href="Disposal Area Operating Permit">Disposal Area Operating Permit</a>, Report of Approval of Plans and Specifications (with conditions).
- (c) All discharges shall comply with the Missouri Water Quality Standards, 10 CSR 20-7.031, Section (3)(C), which states "Waters shall be free from substance in sufficient amounts to cause unsightly color or turbidity...", and Section (4)(G), which states "Water contaminants shall not cause or contribute to turbidity or color that will cause substantial visible contact with the natural appearance of the stream...".
- (d) All activities performed to control erosion on the landfill site (seeding, mulching, terracing, etc.) shall be described and submitted along with the second quarter and fourth quarter Discharge Monitoring Reports. If no erosion controls are undertaken, indicate so on the reports.
- 7. The leachate collection system, irrigation equipment, and land application rates for the phase III leachate management system must be approved by the Solid Waste Program prior to land application taking place. Leachate shall not be land applied to areas that are not underlain by a leachate collection system.